IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

H. MIYAGAWA et al

Serial No.

Filed: March 4, 2002

For: MODULATION SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE AND TESTING METHOD FOR OSCILLATION CIRCUIT

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to the examination thereof, please amend the above-identified application as follows.

IN THE CLAIMS

Please rewrite claims 4-7 as set forth below.

4. (Amended) A modulation semiconductor integrated circuit device according to claim 1, wherein said circuit of producing the second control voltage includes a digital filter which samples a digital transmission data signal and implements a computation for the sampled signal, and a D/A conversion circuit which implements the D/A conversion for the

output of said digital filter, said controlled reference current value being the reference current value of said D/A conversion circuit.

5. (Amended) A modulation semiconductor integrated circuit device according to claim 1, wherein said phase-locked loop includes a variable counter circuit which counts the oscillation output of said oscillation circuit, and a register which sets a value to be counted by said variable counter circuit, the base frequency being changed in response to the alteration of the value set in said register, the reference current value being controlled in accordance with the value set in said register.

6. (Amended) A modulation semiconductor integrated circuit device according to claim 1 including a trimming circuit which adjusts the reference current value.

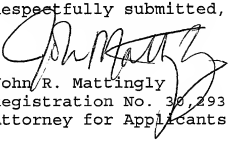
7. (Amended) A modulation semiconductor integrated circuit device according to claim 1, wherein said voltage-controlled oscillation circuit includes a first variable capacitance means and a second variable capacitance means, and has its oscillation frequency varied in response to the

variation in capacitance value of said first variable capacitance means by the first control voltage and in response to the variation in capacitance value of said second variable capacitance means by the second control voltage.

REMARKS

Claims 4-7 have been amended to remove multiple dependencies. Examination is respectfully requested.

Respectfully submitted,



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Date: March 4, 2002

MARKED UP VERSION OF REWRITTEN CLAIMS

4. (Amended) A modulation semiconductor integrated circuit device according to [any of] claim 1 [through claim 3], wherein said circuit of producing the second control voltage includes a digital filter which samples a digital transmission data signal and implements a computation for the sampled signal, and a D/A conversion circuit which implements the D/A conversion for the output of said digital filter, said controlled reference current value being the reference current value of said D/A conversion circuit.

5. (Amended) A modulation semiconductor integrated circuit device according to [any of] claim 1 [through claim 4], wherein said phase-locked loop includes a variable counter circuit which counts the oscillation output of said oscillation circuit, and a register which sets a value to be counted by said variable counter circuit, the base frequency being changed in response to the alteration of the value set in said register, the reference current value being controlled in accordance with the value set in said register.

6. (Amended) A modulation semiconductor integrated circuit device according to [any of] claim 1 [through claim 5] including a trimming circuit which adjusts the reference current value.

7. (Amended) A modulation semiconductor integrated circuit device according to [any of] claim 1 [through claim 6], wherein said voltage-controlled oscillation circuit includes a first variable capacitance means and a second variable capacitance means, and has its oscillation frequency varied in response to the variation in capacitance value of said first variable capacitance means by the first control voltage and in response to the variation in capacitance value of said second variable capacitance means by the second control voltage.